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FOR THE NATIONAL MUSEUM.

Precautions against dangerous Maladies.

IT IS a fatally ascertained fact, that the effluvia of some fevers, and other contagious diseases is retained, and in certain states of the atmosphere, communicated, by the beds and clothing of persons who have had these maladies to a violent degree. It is always proper therefore, nay, it is a solemn moral obligation, that such beds and clothing should be always perfectly washed, scoured and purified before any other person be allowed to lay upon, or make use of them. In some places people have made a universal rule to burn such bedding and clothing, instantly. It is surely better to destroy such things absolutely, than to expose the community, themselves and families, the next moment or at any future season, to a recurrence of dreadful visitation which all deprecate while we are afflicted by it. It will be a pleasure to the writer of this article to lay before the readers of a work devoted to useful discoveries, the easy means by which these terrible dangers may be obviated without literally destroying things which of themselves may be of a certain value. The present is a subject for the contemplation of magistrates and enlightened legislators. It may be good at seasonable times to call the attention of our fellow citizens to a subject interesting to all, and by no means such a *cabala* that it cannot be plainly represented to all comprehensions, and understood by every body; I mean

MEDICAL JURISPRUDENCE,

in plain language, the regulations that should be enforced upon the ignorant, the unfeeling and the lazy, for the preservation of the health and bodily safety of all, themselves included. If I should venture a few essays on this serious subject, I beg you, good Mr. Editor, to support me in the arena, although I shall attempt to express myself in the honest, vulgar, not indecent, terms; and for the good of the country let me beg other gentlemen versed on the subject, to condescend to lay by the jargon which is called technology; that puzzle for plain people, which the liberally learned say is neither Greek, Latin, Calabrian nor Hellenite, but a modern jargon that had better be dispensed with on some occasions. Let the well disposed express themselves in all Latin, all Greek, or all Dutch if they will, and we may chance to find some person who will translate their information into plain English, such as plain folks understand.

There is another fact also demonstrated beyond paradox, and beyond endemic and epidemic contradiction. Feathers as they are plucked from geese and other fowl, retain a portion of the animal juices, blood, grease and other putrefactive matter; this gives out a pernicious exhalation in warm rooms and weather; nay, as some sensible theorists and matter-of-fact men have declared, contributes to the production of pestiferous miasmata, infectious atoms, capable of engendering deadly diseases. In plain expressions, this filth however small, is liable to rot and to spoil the air near it; and it surely does so to a certain degree in damp and in warm weather. A mode of cleaning feathers thoroughly, without injuring their beauty and elastic qualities, &c. and cheap withal, is, I believe, not generally known in the country. Yet of what serious consequence is it that the materials of which beds are composed should be perfectly clean and purified from all corruptible or infectious matter! They should be so at first; they should be thoroughly purified again at certain periods; and they should particularly be cleaned and purified after having been used by any sick person. The writer has at this moment in his consideration the existence of a fever which is causing more than apprehensions in a populous part of the country, at this instant. His recollection still vibrates with the painful sensations of a human being who has been prostrated so lately as last summer with a fever caught in the performance of duty;—whom the dread of being deserted and rendered destitute from fear, induced to prefer disguising the fearful reality, and enduring evils of every other kind until nature sinking under the vain effort, he was indebted for his recovery alone to the mercy of the Creator and the agency of pure air in an open country, among strangers. Men ought not to need suffering to learn benevolence, compassion, humane fellow feeling! The dangers gone through have directed his close attention to some particulars of importance in human economics. If, in consequence, the observations he has just made be deemed of a tendency likely to serve his fellow citizens and fellow creatures, they are at their service, and may be

followed by others, communicated for an occasional corner in The National Museum.

The trouble of scouring bed feathers is not so great as might be thought; and doubtless it would regularly be practiced if an efficacious mode were generally known, or plainly described. There is in this state a very considerable trade in bed feathers which are raised from vast flocks of geese in the marshy parts of Maryland. The farmers and country gentlemen who subscribe to the National Museum cannot require to be told, that handsomely cleaned feathers bring much the best price, and are always more profitable to the owner who disposes of them in the market or at his own door. What remains now to be done, is to give a cheap and extremely easy process for accomplishing the purpose. This is equally practicable with the same perfect convenience, in any private family in town, and equally effectual for purifying the feathers of beds that have been used by sick persons *and their clothing*. The same means are applicable for cleansing the hair used in mattresses. The original description has the recommendation of being well attested and very plainly described. It has certainly not the less merit for coming from—a lady.

IATROS.

New process for clearing feathers from their animal oil, for which the premium was adjudged to the author, Mrs. Jane Richardson, of Willis's Place, Chelsea, by the Society of Arts, London.

THE PROCESS.—Take for every gallon of clean water, one pound of quick-lime; mix them well together, and when the undissolved lime is precipitated in fine powder, pour off the clear lime-water for use, at the time it is wanted.

Put the feathers to be cleared into another tub, and add to them a quantity of the clear lime-water, sufficient to cover the feathers about three inches when well immersed and stirred about therein.

The feathers, when thoroughly moistened, will sink down, and should remain in the lime-water three or four days, after which the foul liquor should be separated from the feathers by laying them on a sieve.

The feathers should afterwards be well washed in clean water and dried upon nets; the meshes about the fineness of cabbage-nets.

The feathers must from time to time be shaken upon the nets, and as they dry will fall through the meshes, and are to be collected for use.

The admission of air will be serviceable in the drying. The whole process will be completed in about three weeks; after being prepared as above mentioned, they will only require beating for use.

Mr. Jolly, poulterer, of Charing-cross, attended a committee of the society appointed to inspect the feathers, and stated that Mrs. Richardson had bought from him forty pounds weight of feathers, in the state they were plucked from dead geese, and in such a condition that if they had been kept in the bag only four days, without being cleansed, they would have been very offensive; that the feathers exhibited by Mrs. Richardson appear to be the same he had sold her, but that they were now in a much cleaner state, and seem perfectly cleared from their animal oil.

The committee, in order to authenticate more fully the merits of Mrs. Richardson's process, requested Mr. Grant, a considerable dealer in feathers, to furnish some specimens of feathers of different kinds in an unclean state, to be cleansed by Mrs. Richardson; in consequence whereof an application was made to Mr. Grant, and the following letter received from him:

SIR—I send herewith three samples of feathers on which the experiments may be tried; but should the quantity not be suffieient, on being favoured with your commands; I shall with pleasure send any quantity required.

The bag No. 1, contains the commonest feathers we ever make use of—it is a Russian produce of various wild fowl; No. 2, gray Dantzick goose; No. 3, a superior kind of Dantzick goose.

The two first are in their raw state, just taken out of the bags in which they were imported; the last have been stoved the usual time (three days,) but retain their unpleasant smell; should it not be considered giving you too much trouble, I shall be extremely obliged by your favouring me with a line when the experiment has been made, and I shall be happy in waiting upon you to know the result.

I am respectfully, Sir,
Your obedient humble servant,
THOMAS GRANT.

No. 226 *Piccadilly.*

After the feathers last mentioned were sent back by Mrs. Richardson, Mr. Grant attended to examine them, and declared that they appeared to be perfectly well cleared.

Certificates from Mr. Christopher Bushnan, No. 10, Beaufort-row, Chelsea, and from Mr. W. Bailey, testified likewise to the efficacy of Mrs. Richardson's process.

Growth of White Thorn.

List of Specimens sent by Mr. Taylor.

No. 1. consists of four specimens of roots, which were planted the latter end of April, 1804, two with only one shoot a-piece, and two with several.

No. 2. consists of two specimens of the best one-year-old seedlings I could select out of 40,000 I purchased this spring, which in fact are two years old from the time the haws were gathered; for they generally remain one year in the ground before they vegetate.

No. 3. consists of two specimens of roots, planted the latter end of April, 1803, which have not been moved before since they were first planted; one with only one shoot, and the other with several.

No. 4. consists of the best two year-old seedlings which I have been able to procure.

No. 5. consists of two specimens of roots, planted the latter end of April, 1802, which I was obliged to remove the spring after I first planted them; this of course retarded their growth, by having new roots to make. These specimens are pruned in the way I always prune thorns when I plant them in my fences; the roots, you may see, are cut, and the top I should have cut at the mark you will find about four or five inches above the root, and shortened the branches below that mark, to about three inches from the stem. I have attached to each specimen the roots I pruned from it, cut into such lengths as I should have done had I used the thorns myself. I think one produced sixteen and the other twenty-two; but that you will be able to judge of when you see them.

No. 6. consists of the best three-year-old seedlings I could get; but both No. 4. and No. 6. labour under the same inconvenience as No. 2, from the haws remaining in the ground generally one year before they vegetate.

An economical Contrivance for filtering and purifying Water on Land or Sea. A Patent was granted for this Contrivance by the French Government in 1799 *to a Mr. Smith, a Scotchman; and the filtering Apparatus made by him obtained the approbation of the Admirals, and all other Persons in France. The Principle was long discovered by Chemists: it consists in a Property of Charcoal, which is capable of rendering even rotted Flesh insipid and innoxious.*

GENTLEMEN—Agreeably to the intention announced in the account of the *Museum of Inventions*, I send you the description of

A cheap Apparatus for filtering and purifying Water.

This apparatus consists of a vessel of wood, metal, earthen-ware, or other convenient material, having holes in the bottom, covered with a piece of thick flannel, on which powdered charcoal is laid, about two inches high. This vessel is placed over another of rather larger diameter, having an aperture near the bottom furnished with a cock; the water to be purified and filtered is poured on the charcoal, through which it gradually passes, and drops perfectly sweet and clear, into the lower vessel; from whence it is drawn off by the cock for use. The charcoal should be made about as fine as sand, either by being pounded in a mortar, or ground in a coffee-mill; which last plan is the best, since it leaves the particles more nearly of one size; it must of course be broken into small pieces, before the mill can receive it. Saw-dust may be burnt into charcoal, and would at once be fine enough for the purpose, if cut from hard wood; but if from soft, it must be pulverized a little more. Some little attention is necessary in putting the charcoal into the vessel; a portion of the charcoal, say about half an inch high, must be well damped, and laid in that state on the flannel; then a second portion of about the same quantity, wetted to the consistence of mortar, is to be put on the first; afterwards a third quantity, wetted still more, should be added; and lastly, the remainder, mixed with so much water as to be easily poured on; after standing a quarter of an hour to settle down, water should be poured on, a little at a time, till it begins to drop, which, if proper care has been taken, will be quite clear and sweet, but having a slightly dusty taste, that will go off after a few hours. Should, however, the first running be a little black, it will not be necessary to disturb the charcoal, because that blackness will soon cease, if water be kept passing through it; and when it once runs clear, will continue to do so for many months, and perhaps years. But although it acts as a filter for so long a time, and will separate whatever of foulness is merely mixed with the water, yet it soon loses the power of attracting that putridity which is in a state of solution; and consequently will not purify more than a given quantity of water.

The following are results of my experiments on this point.—One quart of powdered charcoal, purified;—One gallon of water, taken from the macerating tubs of an anatomical laboratory, where it had been used for many months without being changed, to soak the flesh from the bones; it was the most offensive water that could possibly be procured. The charcoal rendered it perfectly sweet—Six gallons of green stagnant water from a pond.—Ten gallons of the worst water found in the casks on a long sea voyage.—Two hundred gallons of such water as is usually drank on a three months voyage; and—Five hundred gallons of river water taken opposite a large city.

It must be noted, that when charcoal is wanted to purify, it must be fresh burnt; but if only to filter, that precaution is not necessary. When it has lost its purifying quality, it may be recovered again, by being heated red-hot in a crucible, or iron pot, or even an earthen one, over which a piece of tile or plate of iron is loosely laid. In taking the charcoal out of the filtering vessel, a layer of about half an inch should be left on the flannel, because in that case, much less care will be required in returning it into its place again; and the water that first runs, will not have that dusty taste, which it would have if the whole of the charcoal were replaced by that which is fresh burnt. In pouring on the water, great care must be taken not to disturb the charcoal to any considerable depth below the surface, lest the water should pass too rapidly for complete filtration. This accident may be avoided by laying a piece of paper, or cloth, or even a piece of thin board over the charcoal to pour the water on. The

course depend on the quantity of water wanted; that now in my museum is eight inches diameter, and the same depth, and it filters from six to seven gallons every twenty-four hours; the holes in the bottom are about one-eighth of an inch in diameter, and distant from each other about half an inch. The flannel is of that stout kind, usually made for ironing cloths.

The purifying nature of charcoal has been known for a considerable time; but a simple and convenient way of using it, has not, I believe, yet been laid before the public; nor has its filtering property been separately taken notice of. It has been supposed necessary to use sand or some other substance to filter the water, after charcoal has purified it; but on trying a great variety of substances for filtering, I found powdered charcoal by far the best; it suffers a greater quantity of water to pass in a given time, and renders it more clear; and certainly no filtering apparatus can be made cheaper than this. It is also scarcely possible, that a person can be in any situation, either at sea or on land, but that he may procure such a one, in case the water he uses requires it. It is more than probable he can find some kind of a vessel in the bottom of which holes may be made: a piece of flannel or blanket to lay over the holes, or in lieu of these, some thicknesses of linen, canvass, or even some hay, straw or moss; any thing that will support the charcoal, and yet let the water pass through: and he can find a piece of wood, that by burning to a coal, and quenching, will furnish him with charcoal, which he may reduce to powder with a stone, or hammer, in default of a pestle and mortar, or a coffee-mill.

I am, Gentlemen,

Your's &c.

JOHN I. HAWKINS.

No. 79, Great Tichfield-street, London.

AEROSTATION.

CHELTENHAM, SEPT. 8.—*Ascent of the Balloon.*—The prodigious concourse of people assembled yesterday, for the purpose of seeeing the balloon ascend, was similar to that of the day before. About ten o'clock the balloon and car were removed from the Assembly-rooms to the yard belonging to the Iron Railway Company, at the extremity of the town, on the Gloucester road. About 12 o'clock, when the necessary preparations were making for filling the balloon, the wind being extremely boisterous, the poles to which the balloon was to be hoisted, and other temporary preparations, were unfortunately blown down, and the commencement of the filling was retarded till half past one o'clock. The balloon was made of white and crimson silk, in the shape of a Windsor pear, but not upon such a large scale as at first intended. There was some impediment to the process of filling; but at last, at twenty minutes [illegible] of the balloon was ascertained, by its being properly adjusted, when it was the general opinion, that it had not power to rise with Mr. Sadler.

After the car had been properly fastened, Windam Sadler, the son of Mr. Sadler, only between sixteen and seventeen years of age, entered the car, with all the composure and firmness which his veteran father possesses. At a quarter before five o'clock, every thing ascertained to be properly secured, a signal was given, all the ropes were loosened, and the youth ascended with the greatest fortitude, waving a flag in the most exulting manner, the multitude cheering him with repeated huzzas. The balloon rose in the most magnificent style; the atmosphere appeared to favour the ascent, it being extremely calm at the time, and the sky tolerably clear, the wind blowing a gentle breeze to the south-west. The balloon remained in sight for seven minutes; then became obscured for five minutes, re-appeared, and was seen at the north-east end of the town till half past five o'clock. Mr. Sadler set off in a carriage to follow the balloon, and his eldest son on horseback. Various reports were brought during the evening and night of the descent. Mr. Sadler and his eldest son returned here this morning, about seven o'clock, with an account which they had received, and which they thought could be depended upon, that the descent had taken place within a few miles of Chipping Norton, in safety, and that the youth had returned in a chaise and four to Cheltenham; but were greatly surprised, on their arrival, not to find him. At a quarter before two o'clock the intrepid youth arrived, to the great joy of his anxious family. He came in a post-chaise from Oxford, with the balloon in it, and the car at the top.

The report of his aerial voyage is, that for ten minutes he heard the shouts of the people after he had ascended. The greatest difficulty he experienced was, when he was at the highest elevation. The atmosphere then appeared oppressive, and there was a very thick fall of snow, that beat against the balloon with so much violence, that it was with the utmost difficulty he could open the valve, when he descended over Burford, where he heard the people shouting. He rose again to avoid descending on Wedgewood Forest, being fearful of being entangled among the trees. He descended with very little difficulty, at ten minutes before six, in a field near Chadlington-bridge, a short distance from Chipping Norton. The first man that approached him was armed with a pitchfork, who cried, "Lord, Sir, where have you come from?" He was afterwards assisted by the Rev. G. D. Davis, and a number of others, who rendered him every service. He proceeded to Oxford, where he slept. Since his arrival here he has been chaired round the town.

Benefits of Natural science.

COFFEE, SUGAR, *Native Produce* and *Home Manufactures.*—The tropical berries from which is so easily composed the exhilarating & sanative beverage generically call-

ed coffee, now rendered by custom a necessary of life, almost as much as an acknowledged agreeable part of our daily repast, are now at such a price, that a cheap adequate substitute, particularly one of native growth, is become a real desideratum. Should the political commotions of the world not allow us peace within the year, those persons who shall have turned their attention to the cultivation and preparation of suitable natural productions, of which there are many worth the trouble, will reap ample profit and have cause to entertain gratefulness towards the men of science whose patriotism and philanthropy have prompted them to communicate the necessary information, which the narrow minded or monopolists would withhold from each other, suppress, or discredit.

From our own observation and acquired knowledge, we recommend 1. OKRA, *Hibiscus esculentus*, the balsam apple, so well prized for its healing properties, and which is very easy of cultivation; known in most gardens and markets in our country. Cut into pieces and dried in an oven like peaches, but cut smaller, it is prepared for keeping and for daily roasting and use. Roasted and ground like genuine coffee, the okra makes a beverage of the same colour, having a coffee flavour, superior to West India coffee in the opinion of many persons, and very little inferior to the best Arabian or Bourbon. It grows easily from seed after the frost is over, when the ash or catalpha begin to put forth their leaves, and it requires no more trouble in the management of its growth than common cucumbers or kidney beans. 2. *Acorns*, prepared like coffee are used by many persons in Germany and declared to be very good. Physicians have recommended it; but, to be palatable, according to the taste of the writer, who has tried it in that country, the acorns ought to be mixed with a portion of coffee. 3. Succory roots, chichory, *chicorium intybus*. The same observations apply to this as to acorns. However, when this is properly manufactured, which is done on a large scale in Germany, Holland, Switzerland, and the north of France, where they prepare it and sell it in square cakes resembling chocolate; a moderate proportion of it is *goutee* by most persons, as an improvement to the coffee itself, a fact to which every German in this country can testify. The writer has seen extensive fields of this cultivated as far in France as Jemappe, Mons, and Cambray, and was assured by all the farmers that it was a very profitable object of cultivation in every respect, as well as for making coffee cake of the roots. There are these advantages attending the cultivation of succory, that it is a very hardy plant; is sown and grows like grasses on fallow ground; the leaves will bear cutting three times in the season, yielding a large crop which is excellent soil food for hard worked horses that get neither hay, grain, beans nor corn; that it is even a more valuable food for sheep and hogs; the roots also, raw or boiled, are excellent food for cattle. The Swedes sometimes make a most excellent substitute for grain or corn-bread with the roots prepared suitably. The leaves covered to bleach them, by keeping off the light, make one of the best stomachic salads known. Six to eight pounds of seed will do for an acre; and less will do if they be planted out, which is the better way to give all the roots room to grow to a good size. 4. Carrots and parsneps will either of them answer as a part or entire substitute for coffee, and they are very nourishing. From three to six pounds of seed on one acre of sandy loam land will produce from 300 to 900 bushels of carrots accordingly as managed. They are an excellent food for broken winded horses; and remarkable for the quality of speedily fattening sheep and beeves. One bushel a day is a good allowance for a working horse, instead of corn or grain. The tops are as beneficial feeding for cattle, sheep or swine as the roots, and make excellent hay, yielding four tons to the acre, without more trouble than ordinary; no difference in any of the operations being necessary excepting care not to mow too close to the crown of the roots. Without malting, carrots give more spirits than barley, and they have been advantageously distilled with barley, rye, oats, &c. In the towns, the farmer is always sure to get a good price for his carrots on market days. Parsneps thrive on the same kind of land, but do best on rich loams, and like carrots require no manure on loam; but they do not prosper on stiff or wet soils. Rather less seed does for parsneps. It is advantageous for them to be thinned, the roots taken up may be used or elsewhere planted out, leaving the remaining plants ten or twelve inches asunder that their roots may grow thick in substance. Frost does not injure them. They fatten sheep, hogs and horned cattle very quick. Hogs eat them with great satisfaction; their flesh becomes whiter and of the finest imaginable flavour by eating parsneps. Horses eat parsneps greedily and thrive wonderfully upon them, not being heated nor filled by them with the humours and disorders that ensue at times from the free use of oats. Parsneps boiled with hops and fermented with yeast make an excellent beer. And brought to market, they always fetch a good price for town use and sea provisions. They will keep a year in dry sand; and if they should shrivel on board ships, they will nevertheless swell with soaking and boil full and good. The produce under good cultivation is not less than carrots, and has been proved to be more in quantity than potatoes. 5. Beet, the *Mangel Wurtzel*, and Abundance-in-Scarcity-Root. Both that variety; the white, *Beta vulgaris, cicla;* and the red, *B. vulgaris*, are at this present time manufactured in France, &c. into one of the best substitutes for coffee that has been found. Cut into small pieces, dried in a slow oven, roasted and ground, then put into a coffee pot, boiling water poured on, and simmered till the liquor bubbles clear, it is excellent. Either kind will make a beverage of the same colour as coffee; the qualities of each kind are esti- pose, the red beet is th- colour. If there be one third of real coffee with two thirds

of the beet properly prepared the product is truly delicious; it is judged by most connaisseurs scarcely inferior to good Moka. We cannot omit mentioning that both Rye and Horsebeans have been prepared & used by many & vaunted instead of coffee. Rye cakes are better than Rye grain. We cannot however ourselves say that we admire extremely the flavour of either. The best of all the substitutes for coffee we have tasted are, 1, the okra, pulp and seeds, or pulp only, 2. the beet, 3. the succory root, 4. parsnep and carrot.

A mixture of true coffee is an advantage to all of them but not so necessary with okra as with the rest. Doubtless a compound of the different substitutes might improve each other. Respecting the beet we have much valuable information to communicate to our fellow citizens in the columns of the National Museum on another day. It makes excellent sugar in a very great ratio, which has been proved to answer every purpose of cane sugar, to be profitable to the manufacturres, and healthy for the consumer.

This manufacture has successfully occupied the attention of extensive capitalists on the European continent for several years up to the present time. While the sugar cane is introduced and prospers in the southern climates of the U. States, the beet root may render us partly independent of foreign importations in the northern. It makes an abundance of good syrup from which the sugar is concreted. The syrup is excellent for food, safer than honey and more agreeable than molasses; it makes good beer and spirits. Horses, cattle, hogs, and sheep, are fond of the leaves and like to eat them when they are some time cut, nay although they should be beginning to fade. The roots cut into pieces small enough for chewing are good food for cattle. Beets, leaves and roots eaten by cows give a rich delicate sweetness to their milk, cream and butter. Beet is used medicinally, and for the table is served up different ways raw and boiled. The leaves and root are good in salads. The leaves boiled eat like spinach, the stalk and middle veins of the large leaves are good to dress like asparagus. The leaves and the stalks also are good in soups and *potage*. The roots properly cultivated on a suitable soil will grow to eight inches diameter and 18 to twenty and upwards inches round. Some roots have weighed 20 to 26lb. Insects never injure either root or leaves; sown along with that succulent vegetable the artichoke, *cynara scolymus*, they draw away the moles and mice from it.

fact worth noticing in the manufacture of beet is that after being squeezed of the juice which is taken to make syrup and sugar, the substantial residue, pap or pommice, which remains in the press will still do make its admired substitute for coffee; or to distil a spirit resembling half neutral spirit half Jamaica rum; or may be used more profitably than the hard unbruised roots themselves, for feeding cattle. The beet is really a wonderful and valuable root, most worthy the attention of farmers and country gentlemen. We have hitherto hardly known it, except as a pickle. We shall, in a few years, know more of it as a regular object of cultivation, for trading manufacture. It requires a deep light soil and open situation. It may be sown by cast on prepared ground, and trod in before raked; or the seeds planted in hand pin or dibbled holes. The beet does not bear transplanting. It thrives in a deep loamy soil. It grows equally well alone or with carrots, parsneps, onions, &c. and other legumes which will amply pay the cultivator at any time, and more particularly in present circumstances, those which will provide good marketable substitutes for one of our necessary luxuries, while the beet itself can furnish so many absolute ones, coffee & sugar too, spirits & good beer; is good food in every season for man and beast, is as valuable to the farmer as the gardener, and not less so to the sugar boiler, the brewer and the distiller, nay may prove equally so for the traders and for rusticated families in various parts of our country. GEOPOUS.

Mr. Charles Thomspon, now in his eighty-fifth year has just announced in Albany, a Synopsis-Harmony of the Gospels. The same venerable man has completed a translation of the whole bible, which is already printed. These two works have chiefly occupied him since the revolution. This Mr. Thompson was secretary to congress in those times when all the merit and ability in the country were tested.

Scientific Intelligence.

Didot, the famous French PRINTER, has lately published "a Memoir on the properties of a new diving-machine, called a *Triton*," by which a person may, 1. Remain in the water as long as he pleases.—2. He may descend into the water to as great a depth as the column of water displaced by his bulk permits.—3. He may use his arms, legs and body at pleasure: he may walk or labour with ease, at that depth to which he has descended.—4. He runs no hazard; he may give notice when he thinks proper to those who, on the surface, attend his operations.—5. He is not enclosed in the machine, which is but small, and does not prevent his entering into fissures or narrow clefts.—6. The sea being often dark, as Halley informs us, he may carry a lantern down with him, to the depths of the sea, to enlighten the submarine grottoes, or the holds of vessels, into which he may have penetrated.—7. The machine is not costly.—The principal novelty in this machine is the adoption of artificial lungs, by which the difficulty hitherto found of breathing in the sea is remedied.

A Mr. Frodsham, a watch-maker, No. 12, Kingsgate-st. Red Lion square London, announces under the name of a Chatrometer a new invented instrument "for accurately ascertaining distances and routes on maps and plans.——The superiority of these machines consists chiefly in the facility with which any measurement may be made with them; and their accuracy in measuring circles or curved routes—a thing scarcely practicable with compasses when there are many angles, and tedious and uncertain when it is necessary to measure the least curve."

RAISED TO THE LIFE THAT LASTS.

" Hope, humbly, man! with trembling pinions soar;
View the great teacher Death; and God adore!
What future bliss he gives thee not to know,
But gives that hope to be thy blessing now!"

On the 24th ultimo, at Roxbury, Mass. the honourable William Heath, Aged 77, a major-general in the revolution. He was intered with due solemnities.—*Boston* Mrs. Sarah Widdifield 81.—21 ult. at Wilmington, Del. Ferdinand, only son of Pierre Bauduy, Esq. of the greatly patriotic house of Dupont and Bauduy, age 23.—In Weston, Mass. 25 inst. Capt. Robert Calef 83.—In this city Mr. Edward Blackburn 71.—2d instant, Mr. Benjamin Bausman 27.—27 ult. Mrs. Maria Buell. Mr. John Ellicott junior, 34—Mrs. Catharine Sheffield, 50.—At Friend's Cove, Colraine, Pa. Mr. John Harklerode 72. He was thrice married; by the first wife had 15 children, by the surviving one 5. Eighteen of the whole number are alive.—14 inst. at Frankfort, Sussex, N. J. Mr. Mathew Williams 124. He was a native of the principality of Wales, born 1690, a soldier under Q. Anne, was at the taking of Quebec, Minorca and several memorable battles, and finally joined in the revolution of this country. He was upwards of twenty years in the sea service, and more than that time in different services a soldier. He enjoyed his memory till death.

Book-sellers *and authors who are our subscribers, and wish to have works noticed or reviewed by us, or to have our confidential opinion privately, on points relating to such concerns, may forward copies to us free of expense, and state their desire to us: we will accordingly reply. Manufacturers, mechanics, & artizans, who are supporters of the* National Museum, *may forward to us for arrangement and publication, free, any desirable particulars of their manufactures, improvements or inventions. We will pay correspondent attention to all such communications; and enquiries or researches, advantageous to their business or pursuits, or in which they may be desirous of receiving every information in our power to communicate or procure, shall become an object of our immediate attention, for their private use in the one respect, as well as the eventual general good. We shall evince the same liberality to discoverers of useful or remarkable natural productions. Specimens sent to us free shall be examined and analysed, for subscribers gratis.*

TERMS.

Five dollars in advance for the yearly volume, 52 weeks' numbers. Letters to the Editor must be post-paid.

Designs, plans, models and proposals for the monument to be erected to the great WASHINGTON in this city, will be received till the first of May, of this year 1814, by Mr. Eli Simkins, secretary to the managers, Bal ore. Premium for the design, plan or model approved—FIVE HUNDRED DOLLARS.

LINES ON RECEIVING FROM DR. RUSH, OF PHILADELPHIA, AN INKSTAND EXTERNALLY FORMED WITH A PIECE OF THE TREE UNDER WHICH WILLIAM PENN MADE HIS TREATY WITH THE INDIANS, AND WHICH WAS BLOWN DOWN IN 1812.

From clime to clime, from shore to shore,
The war fiend rais'd his hateful yell;
And 'midst the storm that realms deplore,
Penn's honour'd tree of concord fell.

And of that tree, that ne'er again,
Shall Spring's reviving influence know,
A relic o'er th' atlantic main;
Was sent—the gift of foe to foe.

But tho' no more its ample shade,
Waves green beneath Columbia's sky;
Tho' every branch be now decay'd,
And all its scatter'd leaves be dry;

Yet 'midst the relic's sainted space,
A life-restoring flood shall spring,
In which the angel form of peace,
Shall stoop to dip her dove-like wing.

So when the staff the prophet bore,
By wandering eyes again was seen
To swell with life thro' every pore,
And bud afresh with branches green—

The seed despis'd again shall grow,
Till o'er the earth its shade extend;
And this—the gift of foe to foe—
Become the gift of friend to friend. W. ROSCOE.

MADRIGAL

Dear is the blush of early light
To him who ploughs the pathless deep;
When winds have roved throughout the night,
And roaring tempests banished sleep.
Dear is the dawn which springs at last,
And shews him all his perils past.

Dearer to me the break of day,
Which thus thy bended eye illumes;
And chacing fear and doubt away,
Scatters the night of mental glooms.
And bids my spirit hope at last,
A rich reward for perils past! CAMOENS

SONNET IMITATED FROM THE ITALIAN OF PETRARCH.

LONELY and thoughtful, o'er deserted plains,
I pass, with melancholy steps and slow,
Mine eyes intent to shun where'er I go,
The track of man:—from him to hide my pains,
No refuge save the wilderness remains:
The curious multitude would quickly know,
Amidst affected smiles, the cherish'd woe
That wrings my bosom, and consumes my veins.

O that the rocks and streams of solitude,
The vales and woods alone, my griefs might see!
But paths, however secret, wild and rude,
I find, not from tormenting passion free;
Where'er I wander still by love pursued,
With Him I hold communion, HE with ME.

A DAUGHTER TO HER MOTHER, ON HER BIRTH-DAY.

This the day to me most dear
In all the changes of the year:
Spring, the fields and woods adorning.
Spring may boast a gayer morning;
Summer noon with brighter beams
Gild the mountains and the streams:
Autumn, thro' the twilight vale,
Breathe a more delicious gale:
Yet though stern November reigns,
Wild and wintry, o'er the plains,
Never does the morning rise
Half so welcome to mine eyes;
Noontide glories never shed
Rays so beauteous round my head;
Never looks the evening-scene
So enchantingly serene,
As on this returning day,
When, in spirit rapt away,
Joys and sorrows I have known,
In the years forever flown,
Wake, at every sound and sight,
Reminiscence of delight,
All around me, all above,
Witnessing a mother's love.

Love, that watch'd my early years
With conflicting hopes and fears;
Love, that thro' life's flow'ry May
Led my childhood prone to stray;
Love, that still directs my youth
With the constancy of truth,
Heightens every bliss it shares,
Softens and divides the cares,
Smiles away my light distress,
Weeps for joy, or tenderness:
—May that love to latest age
Cheer my earthly pilgrimage;
May that love, o'er death victorious,
Rise beyond the grave more glorious;
Souls, united here, would be
One to all Eternity.

When these eyes, from native night,
First unfolded to the light,
On what object fair and new,
Did they fix their fondest view?
On my mother's smiling mein;
All the mother *there* was seen.
And their weary lids would close,
As she sung me to repose,
Found I not the sweetest rest
On my mother's peaceful breast?
When my tongue from hers had caught
Sounds to utter infant thought,
Readiest then what accents came?
Those that meant my mother's name.
When my timid feet begun,
Strangely pleased, to stand or run,
'Twas my mother's voice and eye
Most encouraged me to try,
Safe to run, and strong to stand,
Holding by her gentle hand.

Time since then hath deeper made
Lines, where youthful dimples play'd,
Yet to me my mother's face
Wears a more angelic grace;
And her tresses thin and hoary,
Are they not a crown of glory?
—Cruel griefs have rung that breast,
Once my paradise of rest;
While in these I bear a part,
Warmer grows my mother's heart,
Closer our affections twine,
Mine with hers, and hers with mine.
—Many a name, since hers I knew,
Have I loved with honour due,
But no name shall be more dear
Than my mother's to mine ear.
—Many a hand, that friendship plighted,
Have I clasp'd, with all delighted,
But more faithful none can be
Than my mother's hand to me.

Thus by every tie endear'd
Thus with filial reverence fear'd
Mother! on this day, 'tis meet,
That, with salutation sweet,
I should wish you years of health,
Worldly happiness, and wealth,
And when good old age is past,
Heaven's eternal peace at last;
But with these I frame a vow
For a double blessing now;
One, that richly shall combine
Your felicity with mine,
One, in which with soul and voice,
Both together may rejoice;
O what *shall* that blessing be?
—Dearest mother, may you see
All *your* prayers fulfill'd *for me!* MONTGOMERY.

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